OFFICE OF ENVIRONMENTAL SERVICES

Water Discharge Permit

FINAL

DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

AI 94338 / PER 20020001
GENERAL PERMIT NUMBER LAR040000
AUTHORIZATION TO DISCHARGE UNDER THE
LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R. S. 30:2001, et seq.), rules and regulations effective or promulgated under the authority of said Acts, this Louisiana Pollutant Discharge Elimination System (LPDES) General Permit is issued. Except as provided in Part I.C of this permit, those operators of storm water discharges from small municipal separate storm sewer systems in the state of Louisiana who submit a completed Notice of Intent and a storm water management plan in accordance with Part II of this permit are authorized under this general permit.

This permit shall become effective on December 5, 2002

This permit and the authorization to discharge shall expire five years from the effective date of the permit.

Issued on December 5, 2002

Linda Korn Levy
Assistant Secretary

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FINAL

LPDES GENERAL PERMIT
DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

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Part I. COVERAGE UNDER THIS PERMIT

A. Permit Area

This permit covers all areas of the State of Louisiana.

B. Eligibility

1. This permit authorizes discharges of storm water from a regulated small municipal separate storm sewer system (MS4) as defined in LAC 33:IX.2341.B.16 and LAC 33:IX.2347, as stated below.

The MS4 systems which are required to obtain permit coverage include:

a) in Urbanized Areas (UAs), all core cities, plus any other MS4 systems operating within the UA unless specifically waived by the LDEQ;

b) outside Urbanized Areas, MS4 systems serving populations of 10,000 to 50,000 and a population density of at least 1,000 persons per square mile which have been "designated" by the LDEQ based on evaluation criteria to determine existing or potential storm water impacts. In general, water quality considerations and overall impacts of storm water discharges will be given more "weight" than population characteristic in the designation process.

c) Other MS4 systems may be designated by the Director in response to a petition or as needed to protect water quality.

LAC 33:IX.2341.B.16: Small Municipal Separate Storm Sewer System - a municipal separate storm sewer system that:

a. is owned or operated by the United States, a state, city, town, borough, county, parish, district, association, or other public body (created by or in accordance with state law) having jurisdiction over disposal of sewage, industrial wastes, storm water, and other wastes, including special districts under state law such as a sewer district, flood control district, or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the state;

b. is not defined as a large or medium municipal separate storm sewer system in accordance with Subsection B.4 and 7 of this Section, or designated under Subsection A.1.e of this Section; and

c. includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

LAC 33:IX.2347:

As an Operator of a Small MS4, am I regulated under the LPDES Storm Water Program?

A. Unless you qualify for a waiver under Subsection C of this Section, you are regulated if you operate a small MS4 including, but not limited to, systems operated by federal, state, tribal, and local governments, including state departments of transportation, and:

1. your small MS4 is located in an urbanized area as determined by the latest Decennial Census by the Bureau of the Census. (If your small MS4 is not located entirely within an urbanized area, only the portion that is within the urbanized area is regulated); or

2. you are designated by the state administrative authority, including where the designation is based upon a petition under LAC 33:IX.2341.F.4.

B. You may be the subject of a petition to the state administrative authority to require an LPDES permit for your discharge of storm water. If the state administrative authority determines that you need a permit, you are required to comply with LAC 33:IX.2348-2350.

C. The state administrative authority may waive the requirements otherwise applicable to you if you meet the criteria of Subsection D or E of this Section. If you receive this waiver, you may subsequently be required to seek coverage under an LPDES permit in accordance with LAC 33:IX.2348.A if circumstances change.

D. The state administrative authority may waive permit coverage if your MS4 serves a population of less than 1,000 within the urbanized area and you meet the following criteria:

1. your system is not contributing substantially to the pollutant loadings of a physically interconnected MS4 that is regulated by the LPDES storm water program; and

2. if you discharge any pollutant(s) that have been identified as a cause of impairment of any water body to which you discharge, storm water controls are not needed based on wasteload allocations that are part of a department-established total maximum daily load (TMDL) that addresses the pollutant(s) of concern.

E. The department may waive permit coverage if your MS4 serves a population under 10,000 and you meet the following criteria:

1. the department has evaluated all waters of the state, including small streams, tributaries, lakes, and ponds, that receive a discharge from your MS4;

2. for all such waters, the department has determined that storm water controls are not needed based on wasteload allocations that are part of a TMDL established by the department or by EPA and approved by EPA that addresses the pollutant(s) of concern or, if a TMDL has not been developed or approved, an equivalent analysis that determines sources and allocations for the pollutant(s) of concern;

3. for the purpose of this Subsection, the pollutant(s) of concern include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from your MS4; and

4. the department has determined that future discharges from your MS4 do not have the potential to result in noncompliance with water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts.

2. The following non-storm water sources may be discharged from the MS4 and are not required to be addressed in the MS4s Illicit Discharge Detection and Elimination plan or other minimum control measures, provided that they have not been determined by the permittee to be substantial sources of pollutants to the MS4:

- water line flushing,
- landscape irrigation,
- diverted stream flows,
- rising ground waters,
- uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)),
- uncontaminated pumped ground water,

- incidental discharges of potable water (e.g. drinking fountain overflows)
- foundation drains,
- air conditioning condensate,
- irrigation water,
- springs,
- water from crawl space pumps,
- footing drains,
- lawn watering runoff,
- water from individual residential car washing,
- flows from riparian habitats and wetlands,
- dechlorinated swimming pool discharges,
- residual street wash water,
- discharges or flows from fire fighting activities (excludes predictable and controllable discharges from a fire fighting training facility); and
- other similar occasional incidental discharges (e.g. non-commercial or charity car washes) where such discharges will not cause a problem either due to the nature of the discharge or controls the MS4 places on the discharge. The permittee must identify all types of discharges that they will allow as occasional incidental discharges and specify those discharges in their storm water management plan (SWMP).

C. Limitations on Coverage

The following discharges are not authorized by this permit:

1. Storm water discharges that are mixed with non-storm water or storm water associated with industrial activity unless such discharges are:

a. in compliance with a separate LPDES permit, or

b. identified by and in compliance with part I.B.2 of this permit.

2. Storm water discharges whose direct, indirect, interrelated, interconnected, or interdependent impacts would jeopardize a listed endangered or threatened species or adversely modify designated critical habitat.

3. Storm water discharges or implementation of your storm water management plan, which adversely affect properties listed or eligible for listing in the National Register of Historic Places, unless you are in compliance with requirements of the National Historic Preservation Act and have coordinated any necessary activities to avoid or minimize impacts with the appropriate State Historic Preservation Officer.

4. Storm water discharges into any waterbody for which a TMDL has been approved that are not in compliance with Part III.B of this permit.

5. Any new source or new discharge containing the pollutants of concern to a 303(d) listed waterbody where a TMDL has not been approved unless allowed under LAC 33:IX.2317.A.9. You may be eligible under this section if you comply with Part IV.F of this permit.

D. Obtaining Authorization

In order for storm water discharges from small municipal separate storm sewer systems to be authorized to discharge under this general permit, a discharger must:

1. Submit a correctly-completed Notice of Intent (NOI - Form MS4-G) and a storm water management plan in accordance with the requirements of Part II below, using the NOI form provided by the State Administrative Authority (or a photocopy thereof).

2. Where the operator changes, or where a new operator is added after the submittal of an NOI under Part II, a new NOI must be submitted in accordance with Part II.

3. Unless notified by the State Administrative Authority to the contrary, dischargers who submit an NOI in accordance with the requirements of this permit are authorized to discharge storm water from small municipal separate storm sewer systems under the terms and conditions of this permit two (2) days after the date that the NOI is postmarked. The State Administrative Authority may later deny coverage under this permit and require submittal of an application for an individual LPDES permit based on a review of the NOI or other information (see Part VI.L of this permit).

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification

1. If you are an operator of a regulated small municipal separate storm sewer system designated under LAC 33:IX.2347.A.1 (located in urbanized areas as determined by the latest Decennial Census by the Bureau of the Census), you must apply for coverage under this permit, or apply for a modification of an existing LPDES permit by March 10, 2003.

2. If you are an operator of a regulated small municipal separate storm sewer system designated under LAC 33:IX.2347.A.2, you must apply for coverage under this permit, or apply for a modification of an existing LPDES permit within 180 days of notice from the LDEQ that coverage is required.

3. Requests for waivers under LAC 33:IX.2347.C (see Part I.B) must be submitted in writing, with supporting documentation, by March 10, 2003.

B. Contents of Notice of Intent

The Notice(s) of Intent shall be signed in accordance with Part VI.G of this permit and shall include the following information:

1. The street address, parish, and the latitude and longitude of the city hall or municipal business office for the MS4 operator for which the notification is being submitted;

2. The name, address, and telephone number of the operator(s) filing the NOI for permit coverage;

3. The names of all states where the applicant has federal or state environmental permits identical to, or of a similar nature to the MS4 permit;

4. A statement that the applicant does not owe any outstanding fees or final penalties to DEQ. If there are outstanding fees or penalties, you should explain why they have not been paid;

5. Is your company a corporation or limited liability company? If not, state so in writing. If yes, attach a copy of the Certificate of Registration and/or Certificate of Good Standing from the Secretary of State. If this question does not apply to your municipality, explain why it doesn't apply.

6. The name of the receiving water(s);

7. In the NOI or as an attachment to the NOI, the following information for each of the six Minimum Control Measures (MCMs) defined below in Part IV.B: a) best management practices (BMPs) to be implemented; b) the measurable goals for each of the storm water minimum control measures, the month and year in which the MS4 operator will start and fully implement each of the minimum control measures, interim milestones, and the frequency of the action; and c) the person or persons responsible for implementing or coordinating the storm water management program (LAC 33:IX.2349.D.1).

C. Where to Submit

NOIs, signed in accordance with Part VI.G of this permit, are to be submitted to the LDEQ at the address: Louisiana Department of Environmental Quality, Office of Environmental Services, P. O. Box 82135, Baton Rouge, LA 70884-2135, Attention: Permits Division.

Part III. SPECIAL CONDITIONS

A. Discharge Compliance With Water Quality Standards

Your discharges must not be causing or have the reasonable potential to cause or contribute to a violation of a water quality standard. Where a discharge is already authorized under this permit and is later determined to cause or have the reasonable potential to cause or contribute to the violation of an applicable State or Federal Water Quality Standard, the permitting authority will notify you of such violation(s) and the permittee shall take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and document these actions in the SWMP. If violations remain or recur, then coverage under this permit may be terminated by the permitting authority, and an alternative general permit or individual permit may be issued, in accordance with Part VLL below. Compliance with this requirement does not preclude any enforcement activity as provided by the Clean Water Act and Louisiana Environmental Quality Act for the underlying violation.

B. Total Maximum Daily Load (TMDL) Allocations

If a TMDL is approved for any waterbody into which you discharge, you must review your storm water management program if the TMDL includes requirements for control of storm water discharges. If you are not meeting the TMDL allocations, you must modify your storm water management program to implement the TMDL within six months of the TMDL's approval or as otherwise specified in the TMDL. TMDL reports are maintained and regularly updated on the LDEQ web site at http://www.deq.state.la.us/technology/index.htm.

C. Releases in Excess of Reportable Quantities

The discharge of hazardous substances or oil in the storm water discharge(s) from a facility shall be prevented or minimized in accordance with the applicable storm water management plan for the facility. This permit does not relieve the permittee of the reporting requirements of LAC 33:I.3915 and LAC 33:I.3917.

1. Emergency Notification - The permittee shall report any noncompliance which may endanger human health or the environment. As required by LAC 33:I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the hotline by telephone at (225) 925-6595 (collect calls accepted 24 hours a day) immediately (reasonable period

of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health, safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.) Notification required by this section will be made regardless of the amount of discharge. A written submission shall be provided within 7 days of the time the permittee becomes aware of the circumstances. The report shall contain the following information:

a. a description of the noncompliance and its cause;

b. the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and,

c. steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

2. Prompt Notification - As required by LAC 33:I.3917, in the event of an unauthorized discharge which does not cause an emergency condition, the discharger shall notify the Office of Environmental Compliance by e-mail utilizing the Incident Report Form and procedures found at www.deq.state.la.us/surveillance or by telephone within 24 hours after learning of the discharge at (225) 763-3908. Notification should be made between the hours of 8 a.m. and 4:30 p.m. on working days. After hours, weekends, and holiday verbal notification can be made by telephoning (225) 342-1234.

In the event the division is unable for any reason(s) to receive the notification required in this section, the discharger shall notify the department at (225) 342-1234 within 24 hours after learning of the discharge. A written submission shall be provided within 7 days of the time the permittee becomes aware of the circumstances.

3. The State Administrative Authority may waive the written report required above, on a case-by-case basis if the oral report has been received within 24 hours.

4. The storm water management plan required under Part IV of this permit must be modified within 14 calendar days of knowledge of the release to: provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be

reviewed to identify measures to prevent the recurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

D. Spills

This permit does not authorize the discharge of hazardous substances or oil resulting from spills.

Part IV. STORM WATER MANAGEMENT PROGRAMS

A. Requirements

Within five years following initial authorization under the permit, you must develop, implement, and enforce a storm water management program, documented in a storm water management plan designed to reduce the discharge of pollutants from your small municipal separate storm sewer system to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Louisiana Environmental Quality Act. Your storm water management program must include the minimum control measures described below in Section B of this Part. Examples of successful programs and suggested measurable goals are also provided in the attached Appendix. Additional program development resources are available through the EPA web site at http://www.epa.gov/ebtpages/water.html. Guidance on Minimum Measures and Measurable Goals and a menu of BMPs can be accessed from the "Publications" link on EPA's main storm water program page which is located at http://www.epa.gov/npdes/stormwater. Examples of the six Minimum Control Measures are provided in the attached Appendix - Guidance Document: Examples of Minimum Control Measures.

B. Minimum Control Measures

The 6 minimum control measures to be included in your storm water management program are:

1. Public education and outreach on storm water impacts.

a. You must:

(1) implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

b. Recommendations:

(1) use storm water educational materials locally developed or provided by: i) the EPA, ii) the LDEQ, iii) environmental, public interest or trade organizations, and/or iv) other MS4s;

(2) inform individuals and households about the steps they can take to reduce storm water pollution, such as ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting

and restoring riparian vegetation, and properly disposing of used motor oil or household hazardous wastes;

(3) inform individuals and groups how to become involved in local stream and beach restoration activities as well as activities that are coordinated by youth service and conservation corps or other citizen groups;

(4) tailor your program, using a mix of locally appropriate strategies, to target specific audiences and communities. You should target some of the materials or outreach programs to be directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant storm water impacts. For example, providing information to restaurants on the impact of grease clogging storm drains and to garages on the impact of oil discharges;

(5) tailor your outreach program to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children.

c. You must define appropriate BMPs for this minimum control measure and measurable goals for each BMP.

2. Public Involvement/Participation

a. You must:

(1) at a minimum, comply with State and local public notice requirements when implementing a public involvement/participation program.

b. Recommendations:

(1) include the public in developing, implementing, and reviewing your storm water management program and make efforts to reach out and engage all economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local storm water management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts. (Citizens should obtain approval where necessary for lawful access to monitoring sites.)

c. You must define appropriate BMPs for this minimum control measure and measurable goals for each BMP.

3. Illicit discharge detection and elimination.

a. You must:

(1) develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at LAC 33:IX.2341.B.2) into your small MS4;

(2) develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;

(3) to the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions;

(4) develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system;

(5) inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste; and

(6) address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, incidental discharges of potable water (e.g. drinking fountain overflows), foundation drains, air conditioning condensate, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering runoff, water from individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and residual street wash water, discharges or flows from fire fighting activities (excludes predictable and controllable discharges from a fire fighting training facility), and other similar occasional incidental discharges (e.g. non-commercial or charity

car washes) where such discharges will not cause a problem either due to the nature of the discharge or controls the MS4 places on the discharge. The permittee must identify all types of discharges that they will allow as occasional incidental discharges and specify those discharges in their SWMP.

b. Recommendations:

(1) ensure that the plan to detect and address illicit discharges includes the following four components: procedures for locating priority areas likely to have illicit discharges; procedures for tracing the source of an illicit discharge; procedures for removing the source of the discharge; and procedures for program evaluation and assessment.

(2) conduct visual screening of the outfalls during dry weather and conduct field tests of selected pollutants as part of the procedures for locating priority areas.

c. You must define appropriate BMPs for this minimum control measure and measurable goals for each BMP.

4. Construction site storm water runoff control.

a. You must:

(1) develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The extent to which the program will rely upon the LPDES Phase II Construction regulation should be specified.

Your program must include the development and implementation of, at a minimum:

(a) an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;

(b) requirements for construction site operators to implement appropriate erosion and sediment control best management practices;

(c) requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

(d) procedures for site plan review which incorporate consideration of potential water quality impacts;

(e) procedures for receipt and consideration of information submitted by the public; and

(f) procedures for site inspection and enforcement of control measures.

b. Recommendations:

(1) include sanctions to ensure compliance - examples include non-monetary penalties, fines, bonding requirements and/or permit denials for non-compliance;

(2) include procedures for site plan review including the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements;

(3) include procedures for site inspections and enforcement of control measures including steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water quality; and

(4) provide educational and training measures for construction site operators, including requiring implementing a storm water pollution prevention plan (SWPPP) at construction sites within your jurisdiction that discharge into your system.

c. You must define appropriate BMPs for this minimum control measure and measurable goals for each BMP.

5. Post-construction storm water management in new development and redevelopment.

a. You must:

(1) develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts;

(2) develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community; and

(3) use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law; and

(4) ensure adequate long-term operation and maintenance of BMPs.

b. Recommendations:

(1) ensure that the BMPs chosen are appropriate for the local community; minimize water quality impacts; and attempt to maintain pre-development runoff conditions;

(2) in choosing appropriate BMPs, participate in locally-based watershed planning efforts which attempt to involve a diverse group of stakeholders including interested citizens. When developing a program that is consistent with this measure's intent, LDEQ recommends that you adopt a planning process that identifies the municipality's program goals (e.g., minimize water quality impacts resulting from post-construction runoff from new development and redevelopment), implementation strategies (e.g., adopt a combination of structural and/or non-structural BMPs), operation and maintenance policies and procedures, and enforcement procedures;

(3) in developing your program, consider assessing existing ordinances, policies, programs and studies that address storm water runoff quality. In addition to assessing these existing documents and programs, you should provide opportunities to the public to participate in the development of the program;

(4) ensure the appropriate implementation of the structural BMPs by considering some or all of the following: pre-construction review of BMP designs; inspections during construction to verify BMPs are built as designed; post-construction inspection and maintenance of BMPs; and penalty provisions for the noncompliance with design, construction or operation and maintenance; and

(5) ensure that your requirements be responsive to the constantly changing storm water technologies, developments or improvements in control technologies.

c. You must define appropriate BMPs for this minimum control measure and measurable goals for each BMP.

6. Pollution prevention/good housekeeping for municipal operations.

a. You must:

(1) develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations; and

(2) using training materials that are available from EPA, LDEQ, or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

b. Recommendations:

(1) at a minimum, consider the following in developing your program:

(a) maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural storm water controls to reduce floatables and other pollutants discharged from your separate storm sewers;

(b) controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by you, and waste transfer stations;

(c) procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris); and

(d) ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices.

and;

(2) include operation and maintenance as an integral component of all storm water management programs. This measure is intended to improve the efficiency of these programs and require new programs where necessary.

c. You must define appropriate BMPs for this minimum control measure and measurable goals for each BMP.

C. Qualifying State or Local Program

For small MS4 operators, you may follow any qualifying program instead of the relevant requirements in IV.B. above. (For example, the State program implementing Phase II Storm Water requirements for Small Construction sites (down to one acre) will largely meet the conditions of Parts IV.B.4 and B.5 above.)

D. Sharing Responsibility

If you are relying on another governmental entity regulated under LAC 33:IX.2341 of the storm water regulations to satisfy one or more of your permit obligations, you must note that fact in your NOI. This other entity must, in fact, implement the control measure(s); the measure of component thereof, must be at least as stringent as the corresponding LPDES permit requirement; and the other entity must agree to implement the control measure on your behalf.

E. Recognizing Responsibility for Another Entity

For small MS4s in parishes/cities/urbanized areas which are already covered by an LPDES storm water MS4 permit, that permittee is already implementing minimum control measures. Therefore, you are not required to include such minimum control measures in your storm water management program. Your permit may be reopened and modified to include the requirement to implement minimum control measures if that entity fails to implement it.

F. Discharges to Water Quality Impaired Waterbodies

If your MS4 discharges into a receiving water which has been listed on the LDEQ Section 303(d) List of Impaired Waters, and your discharges contain the pollutant(s) for which the waterbody is impaired, you must document in your SWMP how the BMPs and other controls selected for your SWMP will control the discharge of the pollutant(s) of concern. If a TMDL has been approved for the waterbody, you must also describe how your SWMP is consistent with any TMDL requirements applicable to your discharge. If a TMDL has not yet been approved, you must describe how the BMPs and other controls selected for your SWMP will reduce the discharge of the pollutant(s) of concern. TMDL reports are maintained and regularly updated on the LDEQ web site at http://www.deq.state.la.us/technology/index.htm.

Part V. MONITORING, RECORDKEEPING AND REPORTING

A. Monitoring

You must, on an ongoing basis during coverage by the permit, evaluate program compliance, the appropriateness of your identified best management practices, and progress towards achieving your identified measurable goals, and make any needed changes/updates to your plan.

B. Recordkeeping

You must keep records required by this permit for at least 3 years. You must submit your records to the LDEQ only when specifically asked to do so. You must make your records, including your storm water management plan, available to the public at reasonable times during regular business hours, in accordance with R.S. 44. (You may assess a reasonable charge for copying.)

C. Reporting

You must submit annual reports to LDEQ by March 10 for the preceding calendar year. Your report must include:

1. The status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving your identified measurable goals for each of the minimum control measures;

2. Results of information collected and analyzed, including monitoring data, if any, during the reporting period;

3. A summary of the storm water activities you plan to undertake during the next reporting cycle; and

4. A change in any identified measurable goals that apply to the program elements.

Part VI. STANDARD PERMIT CONDITIONS

A. Duty To Comply

1. You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and the Louisiana Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2. Penalties for Violations of Permit Conditions.

LA. R.S. 30:2025 provides for civil penalties for violations of these regulations and the Louisiana Environmental Quality Act. LA. R.S. 30:2076.2 provides for criminal penalties for violation of any provisions of the LPDES program, or any order, or any permit condition or limitation issued under said program, or implementing any provisions of the LPDES program.

a. Criminal Penalties

i. Negligent Violations. The Louisiana Revised Statutes LA. R.S. 30:2076.2 provides that any person who negligently violates any provision of the LPDES, or any order issued by the Secretary under the LPDES, or any permit condition or limitation implementing any such provision in a permit issued under the LPDES by the Secretary, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $50,000 per day of violation, or imprisonment of not more than two years, or both.

ii. Knowing Violations. The Louisiana Revised Statutes LA. R.S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or imprisonment for not more than 3 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine or not more than $100,000 per day of violation, or imprisonment of not more than six years, or both.

iii. Knowing Endangerment. The Louisiana Revised Statutes LA. R.S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any order issued by the Secretary under the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES by the Secretary, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000, or by imprisonment for not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this Paragraph, be subject to a fine of not more than one million dollars. If a conviction of a person is for a violation committed after a first conviction of such person under this Paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment.

iv. False Statement. The Louisiana Revised Statutes LA. R.S. 30:2076.2 provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under the LPDES or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the LPDES, shall upon conviction, be subject to a fine of not more than $10,000 or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

b. Civil Penalties

The Louisiana Revised Statutes LA. R.S. 30:2025.E provides that any person found to be in violation of any requirement of this Subtitle may be liable for a civil penalty, to be assessed by the Secretary, the Assistant Secretary, or the court, of not more than the cost to the state of any response action made necessary by such violation which is not voluntarily paid by the violator, and a penalty of not more than $27,500 for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharged is one which endangers human life or health, such person may be liable for an additional penalty of not more than one million dollars.

B. Continuation of the Expired General Permit

This permit expires five years after the effective date. Should this permit expire before it is reissued, this Office will administratively extend the permit to discharge, for permittees that were covered prior to the expiration, until such time that a new general permit is issued. Upon reissuance

or replacement of this permit, the permittee must comply with the requirements for obtaining coverage under the new permit to maintain authorization to discharge.

C. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

E. Duty to Provide Information

The permittee shall furnish to the State Administrative Authority, within a reasonable time, any information which the administrative authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the State Administrative Authority, upon request, copies of records required to be kept by this permit.

F. Other Information

When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the State Administrative Authority, he or she shall promptly submit such facts or information.

G. Signatory Requirements

All storm water management plans, storm water pollution prevention plans, reports, certifications or information either submitted to the State Administrative Authority or that this permit requires be maintained by the permittee, shall be signed as follows:

All reports required by the permit and other information requested by the State Administrative Authority shall be signed by a person described in LAC 33:IX.2333.A, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described in LAC 33:IX.2333.A,

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,

3. The written authorization is submitted to the State Administrative Authority.

4. **Certification.** Any person signing documents under Part VI.G shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Penalties for Falsification of Reports

The Louisiana Revised Statutes LA.R.S.30:2076.2 provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under the LPDES or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the LPDES, shall, upon conviction, be subject to a fine of not more than $10,000, or imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

I. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

J. Property Rights

Authorization to discharge pursuant to the conditions of this permit does not relieve the permittee of any liability for damages to state waters or private property. For discharges to private land this permit does not relieve the permittee from obtaining approval from the landowner for appropriate easements and rights of way.

K. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

L. Requiring an Individual Permit or an Alternative General Permit

1. The State Administrative Authority may require any person authorized by this permit to apply for and/or obtain either an individual LPDES permit or an alternative LPDES general permit. Any interested person may petition the State Administrative Authority to take action under this paragraph. Where the State Administrative Authority requires a discharger authorized to discharge under this permit to apply for an individual LPDES permit, the State Administrative Authority shall notify the discharger in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application, and a statement that on the effective date of issuance or denial of the individual LPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate unless otherwise specified by the State Administrative Authority. Applications shall be submitted as indicated in Part II of this permit. The State Administrative Authority may grant additional time to submit the application upon request of the applicant. If a discharger fails to submit in a timely manner an individual LPDES permit application as required by the State Administrative Authority under this paragraph, then the applicability of this permit to the individual LPDES permittee is automatically terminated at the end of the day specified by the State Administrative Authority for application submittal.

2. Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. In such cases, the permittee shall submit an individual application in accordance with the requirements of LAC 33:IX.2345.B.3.c, with reasons supporting the request, to the State Administrative Authority at the address indicated in Part II.C of this permit. The request may be granted by issuance of an individual permit or an alternative general permit if the reasons cited by the permittee are adequate to support the request.

3. When an individual LPDES permit is issued to a discharger otherwise subject to this permit, or the discharger is authorized to discharge under an alternative LPDES general permit, the applicability of this permit to the individual LPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual LPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied for coverage under an alternative LPDES general permit, the applicability of this permit to the individual LPDES permittee is automatically terminated on the date of such denial, unless otherwise specified by the State Administrative Authority.

M. State Environmental Laws

1. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation.

2. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

N. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of the storm water management plan. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

O. Inspection and Entry

The permittee shall allow the State Administrative Authority, the EPA, or an authorized representative (including an authorized contractor acting as a representative of the State Administrative Authority), or, in the case of a construction site which discharges through a municipal separate storm sewer, an authorized representative of the municipal operator or the separate storm sewer receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit. Most inspections will be unannounced and should be allowed to begin immediately, but in no case shall begin more than thirty (30) minutes after the time the inspector presents his/her credentials and announces the purpose(s) of the inspection. Delay in excess of thirty (30) minutes shall constitute a violation of these regulations. However, additional time can be granted if the inspector or the Administrative Authority determines that the circumstances warrant such action;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit. For records maintained in either a central or private office that is open only during normal office hours and is closed at the time of inspection, the records shall be made available as soon as the office is open, but in no case later than the close of business the next working day;

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Louisiana Environmental Quality Act, any substances or parameters at any location.

P. Upset Conditions

1. Upset - an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

2. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Part VI.P.3 are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

3. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the permittee can identify the cause(s) of the upset;

b. The permitted facility was at the time being properly operated;

c. The permittee submitted notice of the upset as required by Part III.C.1, III.C.2, and III.C.3.; and,

d. The permittee complied with any remedial measures required by Part III.A.

4. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

Q. Removed Substances

Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State.

R. Prohibition for Tampering: Penalties

1. No person shall falsify, tamper with, or knowingly render inaccurate, any monitoring device or method required to be maintained under this permit.

2. Any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method to be maintained under this permit shall, upon conviction, be subject to penalties in accordance with the state statutes LA. R. S. 30:2076.2.

S. Availability of Reports

All recorded information (completed report forms or any public document) not classified as confidential information under R.S. 30:2030(A) and 30:2074(D) and designated as such in accordance with these regulations (LAC 33:IX.2323 and LAC 33:IX.2763) shall be made available to the public for inspection and copying during normal working hours in accordance with the Public Records Act, R.S. 44:1 et seq.

Claims of confidentiality for the following will be denied:

a. The name and address of any permit applicant or permittee;

b. Permit applications, permits, and effluent data.

c. Information required by LPDES application forms provided by the State Administrative Authority under LAC 33:IX.2331 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

T. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause in accordance with LAC 33:IX.2383, 2385, 2387, 2407 and 2769. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Part VII. REOPENER CLAUSE

If there is evidence indicating that the discharges authorized by this permit cause, have the reasonable potential to cause or contribute to a violation of a water quality standard, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with Part VI.L of this permit or the permit may be modified to include different requirements and/or limitations. The permit may also be reopened to incorporate the results of any total maximum daily load (TMDL) allocation which may later be approved for the receiving waterbodies.

Part VIII. COVERAGE UNDER SUBSEQUENT PERMITS

Should this permit expire before it is reissued, this Office will administratively extend the permit to discharge until such time that a new general permit is issued. Information regarding obtaining coverage under a reissued permit will be included in that permit.

Part IX. DEFINITIONS

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Clean Water Act (Water Quality Act)" - formerly the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972. Public Law 92-500; 33 U.S.C. § 1251 eq seq.; legislation which provides statutory authority for the NPDES program. Also known as the Federal Water Pollution Control Act.

"Conduit" means any channel or pipe used to transport flowing water.

"Control Measure" as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the United States.

"Conveyance" as used in this permit means the process of moving water from one place to another.

"CWA" means the Clean Water Act or the Federal Water Pollution Control Act, 33 U.S.C §1251 et seq.

"Detention" means a storm water system that delays the downstream progress of storm water runoff in a controlled manner. This is typically accomplished using temporary storage areas and a metered outlet device.

"Discharge" means the volume of water (and suspended sediment in surface water) that passes a given location within a given period of time.

"Discharge of Storm Water Associated with Construction Activity" as used in this permit, refers to storm water "point source" discharges from areas where soil disturbing activities (e.g., clearing, grading, or excavation, etc.), construction materials or equipment storage or maintenance (e.g., fill piles, concrete truck washout, fueling, etc.), or other industrial storm water directly related to the construction process (e.g., cement/concrete or asphalt batch plants, etc.) are located.

"Erosion" occurs when land is diminished or worn away due to wind, water, or glacial ice. Often the eroded debris (silt or sediment) becomes a pollutant via storm water runoff. Erosion occurs naturally but can be intensified by land clearing activities such as farming, development, road-building, and timber harvesting.

"Excavation" is the process of removing earth, stone, or other materials from land.

"Flood Control" is defined as the specific regulations and practices that reduce or prevent the damage caused by storm water runoff.

"Grading" is defined as the cutting and/or filling of the land surface to a desired slope or elevation.

"Illicit Connection" is defined as any discharge to a municipal separate storm sewer that is not composed entirely of storm water and is not authorized by an LPDES permit, with some exceptions (e.g., discharges due to fire fighting activities).

"Industrial Activity" is defined as any activity which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant.

"Large and Medium Municipal Separate Storm Sewer System" means all municipal separate storm sewers that are either:

(i) located in an incorporated place (city) with a population of 100,000 or more as determined by the 1990 Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of LAC 33:IX); or

(ii) located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of LAC 33:IX); or

(iii) owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the State Administrative Authority as part of the large or medium municipal separate storm sewer system.

"Louisiana Pollutant Discharge Elimination System (LPDES)" means those portions of the Louisiana Environmental Quality Act and the Louisiana Water Control Law and all regulations promulgated under their authority which are deemed equivalent to the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act in accordance with Section 402 of the Clean Water Act and all applicable federal regulations.

"Maximum Extent Practicable (MEP)" is defined as a standard for water quality that applies to all MS4 operators regulated under the LPDES Storm Water Program. Since no precise definition of MEP exists, it allows for maximum flexibility on the part of MS4 operators as they develop and implement their programs.

"Municipal Separate Storm Sewer System (MS4)" is a publicly-owned conveyance or system of conveyances that discharges to waters of the U.S. and is designed or used for collecting or conveying storm water, is not a combined sewer, and is not part of a publicly-owned treatment works (POTW).

"National Pollutant Discharge Elimination System (NPDES)" means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Clean Water Act.

"Notice of Intent (NOI)" is an application to notify the permitting authority of a facility's intention to be covered by a general permit; exempts a facility from having to submit an individual or group application.

"Office" means the Office of Environmental Services within the Department of Environmental Quality.

"Operator" means the person or legal entity responsible for the operation and/or maintenance of a facility with a discharge covered by these regulations that meets either of the following two criteria: (1) the party has operational control over the storm water management plan (including the ability to make modifications to the plan), or (2) the party has day-to-day operational control of those activities which are necessary to ensure compliance with the storm water management plan or other permit conditions (e.g., they are authorized to direct workers to carry out activities identified in the storm water management plan or comply with other permit conditions).

"Outfall" is the point where wastewater or drainage discharges from a sewer pipe, ditch, or other conveyance to a receiving body of water.

"Permitting Authority" is the NPDES-authorized state agency which in the State of Louisiana is the Louisiana Department of Environmental Quality (LDEQ).

"Person" is any individual, municipality, public or private corporation, partnership, firm, the United States Government and any agent or subdivision thereof, or any other juridical person which shall include, but is not limited to, trusts, joint stock companies, associations, the State of Louisiana, political subdivisions of the state, commissions, and interstate bodies.

"Physically interconnected" means that one MS4 is connected to a second MS4 in such a way that it allows for direct discharges into the second system.

"Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

"Pollutants of Concern" include biological oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment in any water body to which the MS4 discharges.

"Retrofit" means the modification of storm water management systems through the construction and/or enhancement of wet ponds, wetland plantings, or other BMPs designed to improve water quality.

"Runoff" means drainage or flood discharge that leaves an area as surface flow or as pipeline flow, or drainage or flood discharge that has reached a channel or pipeline by either surface or sub-surface routes.

"Sanitary Sewer" is a system of underground pipes that carries sanitary waste or process wastewater to a treatment plant.

"Sediment" is defined as soil, sand, and minerals washed from land into water, usually after rain. Sediment can destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

"Site Plan" means a graphical representation of a layout of buildings and facilities on a parcel of land.

"Site Runoff" means any drainage or flood discharge that is released from a specified area.

"Small Municipal Separate Storm Sewer System (Small MS4)" is defined as any MS4 that is not regulated under Phase I of the NPDES Storm Water Program, plus Federally-owned MS4s.

"Stakeholder" means an entity that holds a special interest in an issue or program -- such as the storm water program -- since it is or may be affected by it.

"State Administrative Authority" means the Secretary of the Department of Environmental Quality or his designee or the appropriate assistant secretary or his designee.

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Storm Water Associated with Industrial Activity" is defined at LAC 33:IX.2341.B.14 and incorporated here by reference.

"Storm Water Discharge Associated with Small Construction Activity" is defined at LAC 33:IX.2341.B.15. This includes discharges of storm water from construction activities including clearing, grading and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one or less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

"Storm Water Management" is defined as functions associated with planning, designing, constructing, maintaining, financing, and regulating the facilities (both constructed and natural) that collect, store, control, and/or convey storm water.

"Storm Water Management Program" is defined as a detailed enforceable program designed to reduce the discharge of pollutants from an MS4 to the maximum extent practicable (MEP), to protect water quality and to satisfy the appropriate water quality requirements of the Louisiana Water Pollution Control Law and the federal Clean Water Act. The storm water management program must include the minimum control measures described in LAC 33:IX.2349.B and satisfy all of the requirements set forth in LAC 33:IX.2349.

"Storm Water Pollution Prevention Plan (SWPPP)" is a plan that describes a process whereby a facility thoroughly evaluates potential pollutant sources at a site and selects and implements appropriate measures designed to prevent or control the discharge of pollutants in storm water runoff.

"Surface Water" is defined as water that remains on the surface of the ground, including rivers, lakes, reservoirs, streams, wetlands, impoundments, seas, estuaries, etc.

"Total Maximum Daily Loads (TMDLs)" are water quality assessments that determine the source or sources of pollutants of concern for a particular waterbody, consider the maximum amounts of pollutants the waterbody can assimilate, and then allocate to each source a set level of pollutants that it is allowed to discharge (i.e., a "wasteload allocation").

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

"Urban Runoff" is storm water from urban areas, which tends to contain heavy concentrations of pollutants from urban activities.

"Urbanized Area (UA)" is a Bureau of the Census determination of a central place (or places) and the adjacent densely settled surrounding area -- urban fringe -- that together have a minimum residential population of 50,000 people and an overall population density of 1,000 people/square mile. It is a calculation used by the Bureau of the Census to determine the geographic boundaries of the most heavily developed and dense urban areas.

"Waters of the State" means all surface waters which are subject to the ebb and flow of the tide, lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, impoundments of waters within the state of Louisiana otherwise defined as "waters of the United States" in 40 CFR 122.2 and tributaries of all such waters. "Waters of the state" does not include waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act, 33 U.S.C. 1251, et seq.

"Watershed" is that geographical area which drains to a specified point on a water course, usually a confluence of streams or rivers (also known as drainage area, catchment, or river basin).

APPENDIX

GUIDANCE DOCUMENT:
EXAMPLES OF MINIMUM CONTROL MEASURES

Appendix
LAR040000 - AI 94338

1. Public education and outreach on storm water impacts.

Storm Drain Stenciling Program

The City of Monterey, CA, put together a storm drain stenciling kit that could be used by volunteers stenciling storm drains. The kit included stencils, traffic cones, trash bags, paint and paint rollers, buckets, latex gloves, orange vests, and wet paint signs. Instructions on stenciling were also provided. Volunteers were asked to mark the storm drains they had stenciled on city maps, as well as provide any locations of storm drains that were not on city maps. For further information contact the Public Works Engineering Division (408) 646-3920. Source: Model Urban Runoff Program, Appendix 3C.

Enviroscape Model

The cities of Monterey and Santa Cruz, CA, used a 3-dimensional plastic model of a miniature city to offer a hands-on approach to demonstrate water pollution of watersheds caused by various urban runoff sources. Participants sprinkle cocoa and colored drink mixes to simulate oil, paint, herbicides and pesticides. Participants then spray water on to the site to simulate rainfall. The model was taken to schools and city events to educate and elicit support from the community. Model Available from Terrene Institute (202) 833-8317. Source: Model Urban Runoff Program, Appendix 3D.

City of Miami Beach, Florida MS4 Storm Water Permit - 9/30/93

As a public awareness and education program, the city shall:

- publicize and promote public awareness of the hazards of illicit dumping to the storm sewer system, through newspaper articles, pamphlets and bill inserts.
- establish and publicize a dedicated phone number to inform the public of the nearest locations for dumping used oil and hazardous household waste, and to report illegal dumping to the storm sewer system.
- initiate sewer stenciling program
- provide used oil collection sites and post these locations at the local oil retailers.

Baltimore County, MS MS4 Storm Water Permit - 3/30/95

Within 1 year, the permittee shall begin implementing its pilot educational program for the control of storm water pollutants. Components of the educational program shall include the development of informational materials and brochures; presentation packets for distribution to schools, businesses, and homeowners; and surveys for gauging program effectiveness. Topics covered shall include the identification and reporting of illicit connections, proper disposal of household toxic waste, and volunteer opportunities for conducting stream surveys and cleanups. In year 2 the permittee shall perform an assessment of its educational programs and propose a schedule for expanding successful components to the entire county.

Portland, OR MS4 Storm Water Phase I Case Study
Portland has developed a program that regularly monitors storm water outfalls for pollution discharges, which has effectively halted illicit pollutant discharges, and is helping to prevent new pollutant discharges. In addition, with a 60 percent voter approval, Portland has established a $135.6 million bond measure to acquire up to 6,000 acres of land area to better manage sensitive watersheds and secure better protection of urban waterways. Portland's industrial permit inspection program has seen storm water violations decrease from 30 to 23 percent since their permit was issued in 1995, and compliance with storm water pollution control plans has more than doubled from 41 percent to 87 percent.

Minneapolis, MN MS4 Storm Water Phase I Case Study
Minneapolis has demonstrated that outreach efforts can be correlated to reductions in pollutants; pesticide concentrations in storm water can be reduced through public outreach efforts. Pollutant concentrations of pesticides monitored in a Minneapolis lake dropped between 59 and 86 percent depending on the pesticide evaluated, due to the outreach effort. Minneapolis's outreach effort is similar to that of many Phase I cities (e.g., San Francisco) that recognize the benefits of education and re-education of the public about their role in protecting storm water quality. Frequently, the effectiveness of public outreach is measured in terms of changes in public awareness and behavior, but the Minneapolis case study demonstrates water quality improvement does occur as a result of public outreach efforts, a common feature in the storm water programs operated by Phase I permittees.

Sacramento, CA MS4 Phase I Storm Water Case Study
Outreach/education efforts of Phase I jurisdictions also focus on businesses that produce high volumes of liquid wastes with the potential to pollute storm water (e.g., automotive cleaning operations/car lots, carpet cleaners). In Sacramento, CA, a Phase I MS4 permittee, an innovative program has been introduced to reduce wash water discharges from carpet cleaning businesses. Through a "Clean Business" certification program, businesses get credit for correct disposal of wash water, home-owners have a chance of winning prizes through a lottery, and wash water is treated fully at the wastewater treatment plant. While thousands of gallons of wash water are now successfully treated, monitoring to measure the change in local water quality resulting from the business outreach effort have not been funded.

2. Public involvement/participation.

Public presentations
Conducting public presentations with city councils and municipal staff is a valuable way to approach the development of storm water management programs. To accomplish this aim, it is useful to have a 'stock presentation,' which describes current problems, including drainage deficiencies and water quality contaminants of concern. In addition, potential funding issues, possible solutions, and the LPDES regulatory background should be addressed in the presentation. In short, the objective of the presentation is to inform the community of the need for a storm water management program. This

presentation can then be used for neighborhood groups, businesses, commercial property owners and local service clubs. For a sample municipal Storm Water Management Program Presentation Outline, see Model Urban Runoff Program, Appendix 3A.

Community Clean Up

The City of Tulsa, OK, created a floatables-reduction program that utilized education and community participation. 'Operation Cleansweep' brought citizens together to clean up designated basins, pick up roadside trash, and remove obstructions from channels. For further information contact the Public Works Department, Tulsa, OK, (918) 591-4379. Source: NRDC, Storm Water Strategies Community Responses to Runoff Pollution, May 1999.

County of Riverside, Santa Ana CA MS4 Storm Water Permit - 3/8/96

The regional board recognizes the significance of Riverside County's Storm Water/Cleanwater Protection program and will conduct, participate, and/or assist with at least one workshop every year during the term of this permit to promote and discuss the progress of the storm water management program. The details of the annual workshop will be published in local newspapers and mailed to interested parties.

City of Milwaukee, WI Storm Water Permit - 10/21/94

A program to promote the management of stream banks and shorelines by riparian land owners to minimize erosion and restore or enhance the ecological values of the waterway.

City of Monterey, CA MS4 Storm Water Phase II Community Case Study

In the city of Monterey, CA, a Phase II community, grass-roots efforts have assisted in identifying and implementing the necessary storm water management controls to protect the Monterey Bay National Marine Sanctuary in California, one of the most diverse marine environments in the United States. In particular, volunteers contribute, on average, an estimated 1,500 annual hours to monitor for unacceptable dry weather discharges for MS4s. The efforts of the volunteers have significantly reduced the amount of pollutants entering the estuary.

Sacramento, CA MS4 Storm Water Case Study

In Sacramento, CA, an innovative program has been introduced to reduce wash water discharges from carpet cleaning businesses. Through a "Clean Business" certification program, businesses get credit for correct disposal of wash water, home-owners have a chance of winning prizes through a lottery, and wash water is treated fully at the wastewater treatment plant. While thousands of gallons of wash water are now successfully treated, monitoring to measure the change in local water quality resulting from the business outreach effort have not been funded.

3. Illicit discharge detection and elimination.

Identifying and Detecting Illicit Discharges with Volunteers
In 1998, the Alabama Water Watch Association and the Birmingham Storm Water Management Authority forged a partnership to train volunteers to help identify and detect illicit discharges by monitoring the city's 158 critical screening sites and outfalls. For further information contact the Alabama Water Watch Association, (888) 844-4785. Source: NRDC, Storm Water Strategies Community Responses to Runoff Pollution, May 1999.

Illicit Connections and Fluorescent Dye
Washtenaw County, MI, initiated a program whose focus was eliminating illicit connections and discharges to the storm drain system. Crews visited industrial, commercial, and residential properties and asked permission to flush fluorescent dye through toilets or drains, then monitored nearby sanitary drain lines and storm drain lines to see where the dye had gone. Over 95 percent of the facilities contacted for dye testing cooperated. If inspectors found an illicit connection to the storm drains, the owner or the manager of the building was notified and informed of potential remedies. Recommended remedies were often very simple, such as sealing an unused floor drain. If after three letters the problem was not fixed, the program refers the site to the relevant municipality for possible enforcement action under the municipality's building code. For further information contact the Drain Commissioner, Washtenaw County, MI, (734) 994-2525. Source: NRDC, Storm Water Strategies Community Responses to Runoff Pollution, May 1999.

Reporting Illicit Discharges
The Alameda Countywide Clean Water Program developed forms for use by inspectors during inspections of dry-weather flows. This information could then be incorporated into an Illicit Discharge Inspection Quarterly Summary Report. The number of cases of illicit discharges detected, eliminated, or status taken towards elimination are documented on the form. For further information contact the Alameda County Countywide Clean Water Program, Alameda County Public Works, (510) 670-5543. Source: Model Urban Runoff Program, Appendix 3I.

Collection/Recycling
The City of Tulsa, OK, organized free dump days at the landfill and the collection/recycling of used motor vehicle fluids and household hazardous wastes. The efforts were coordinated with the Metropolitan Environmental Trust, an organization that operates recycling depots around the city. To increase participation, the city sponsored two collection days each year. Participants also received educational material on the importance of recycling and using environmentally friendly alternatives to hazardous household chemicals. At the same time, other community programs focused on this issue included an environmental summit for middle and high school students and a program that involves area business through clean ups, recycling, and donations. For further information contact the Public Works Department, Tulsa, OK, (918) 591-4379. Source: NRDC, Storm Water Strategies Community Responses to Runoff Pollution, May 1999.

City of Philadelphia, PA MS4 Storm Water Permit - 9/29/95

Illicit discharge prevention: During construction/reconstruction of sewers, the city will color code the sanitary 5" and storm 6" laterals to assist plumbing contractors with making proper connections. City inspectors shall verify that proper connections to sanitary and storm sewers have been made. The city shall require a certification of proper connections by the contractor, with a copy of the certification given to the homeowner.

Baltimore County, MD MS4 Storm Water Permit - 3/30/95

Within 6 months, the permittee shall begin implementing its illicit detection program as a pilot study and screen a minimum of 50 outfalls within the year. Within the next year, the permittee shall complete its Manual of Practice for Detection and Removal of Illicit Connections which shall include a detailed description of procedures for the investigation of illicit connections and enforcement. Additionally, the illicit detection program shall be expanded to screen at least 200 outfalls per year.

Charles River, MA Watershed Case Study (Boston, MA MS4 Phase I Storm Water Program)

The successes in the Charles River watershed in Massachusetts demonstrates how storm sewer inspections/dry-weather monitoring has resulted in a quantifiable reduction in pollutant discharge through the storm sewer system. Boston, MA, a Phase I permittee, is a major participant in a multi-jurisdictional effort to improve water quality in the Charles River. As required by its Phase I MS4 storm water permit, Boston is inspecting its storm sewer system for cross-connections (i.e. points were sanitary sewers incorrectly discharge into storm water sewers). As a result, Boston has identified a number of cross-connections, the largest of which discharged raw sewage into the storm drain system at an average rate of 70,000 gallons per day. At this flow rate, this sewer pipe annually discharged 650,000 pounds of biochemical oxygen demand (BOD) and significant numbers of bacteria into waterways where swimming and boating opportunities have been limited by bacteria. Because of Boston's efforts and the efforts of other upstream municipalities, dry-weather water quality has improved, as has the opportunity for secondary-contact recreation.

Dover, NH MS4 (potential Phase II) Storm Water Case Study

Dover, NH, a potential Phase II MS4 jurisdiction, has demonstrated how an aggressive illicit connection identification and elimination program can restore water quality degraded by sanitary sewer cross-connections to the storm sewer system. Once a single storm sewer pipe with cross-connections to the MS4 were removed and repaired, the water quality of discharges from that storm sewer improved by over 99 percent based on measured enterococci bacteria. (National SW Awards materials)

4. Construction site storm water runoff control.

Guidance Brochures
The cities of Fairfield and Suisun City (CA) developed a guidance brochure, which was targeted to the development/construction community. It details storm water controls for small construction sites (less than 5 acres). The material also provides information about why storm water controls are needed and how construction activities affect storm water quality. Furthermore, the brochure includes information about plan requirements: general site information; site topography with map; sediment control practices; housekeeping practices; and materials management practices. For further information contact the Fairfield-Suisun Urban Runoff Management Program (707) 429-8930. Source: Model Urban Runoff Program, Appendix 3O.

Educating Contractors
The city of Chattanooga, TN, developed an erosion control education program. Although on-site training sessions were initially conducted for contractors, the city found the most success with the development of the Erosion Control School. Both private sector and city government personnel involved in land development may sign up for the Erosion Control School, which is co-sponsored by the city and the Chattanooga Home Builders' Association. In a free four-hour session, the attendees learn the city's erosion control requirements, as well as cost-effective ways to meet those requirements. Tests before and after the course measure learning and those who pass the second test receive a certification card. For further information contact the Water Quality Supervisor, Tennessee Department of Public Works, (423) 757-0013. Source: NRDC, Storm Water Strategies Community Responses to Runoff Pollution, May 1999.

Enforcement
Active enforcement of local requirements is a cornerstone of the construction runoff program for Garland, TX. Inspectors visit each construction site at least monthly, with some higher-priority sites receiving more frequent visits. The program uses stop-work orders (rather than citations) to get developers to correct violations such as faulty, or nonexistent, structural or source controls. Site operators were found to make corrections within 24 hours. In addition, EPA Region 6 in Dallas has assisted Garland and other cities in the region with enforcement activities of more severe violations. For further information contact the Storm Water Coordinator, City of Garland, TX, (972) 205-2189. Source: NRDC, Storm Water Strategies Community Responses to Runoff Pollution, May 1999.

Bal Harbour Village, FL MS4 Storm Water Permit - 9/30/93
The permittee will amend its land development regulations to require that applicants submit specific plans for local erosion and sediment control for the development of the site. Such plans will be a combination of notes (statements) and specifically noted locations on the plan sheets. These plans will be reviewed and subject to approval simultaneously with other plan materials required by the permittee.

City of Miami Beach, FL MS4 Storm Water Permit - 9/30/93

A procedure for educating contractors and developers is being reviewed, where the contractor will go through a checklist and sign for the items that will be adopted to minimize site runoff. This list when approved at the processing stage shall become part of the issued building permit and thus be subject to regular building inspections. Building sites over 50,000 square feet shall be required to submit a site plan in addition to the above showing control measures during the various phases of construction. Some of the measures included in the checklist shall be:

- Availability of on site detention control for holding concrete truck and miscellaneous washing runoffs.
- Perimeter barrier fence with reverse slope access way to contain storm runoff
- Use of containers to confine solid waste and construction debris.

Nashville, TN MS4 Storm Water Permit - 4/3/96

The permittee shall improve its construction site inspection and enforcement procedures by carrying out the following:

i) to hire and train three additional construction inspectors (12 months);
ii) to update the inspector's checklist to meet the state's general permit (12 months);
iii) to establish an electronic database of construction sites to enable tracking of inspections, complaints, violations, and follow-up (12 months);
iv) to purchase 4 vehicles and associated equipment for inspectors;
v) to conduct annual training workshop for construction inspectors;
vi) to modify existing ordinances to set up greater penalties (12 months);
vii) to gain greater priority in the environmental court for violations at construction sites (24 months).

5. Post-construction storm water management in new development and redevelopment.

Soil Erosion and Storm Water Runoff Control Ordinance

In 1991, Grand Traverse County, MI, adopted an ordinance requiring on-site retention for all commercial developments and new subdivisions. The county developed the ordinance in cooperation with the community through open workshops, hearings, and a citizens' advisory committee. The ordinance requires soil erosion and storm water runoff control permits at sites greater than 1 acre or within 500 feet of a lake or stream. For further information contact the Drain Commissioner, Grand Traverse County, MI (616) 922-4731. Source: NRDC, Storm Water Strategies Community Responses to Runoff Pollution, May 1999.

Development Planning
As part of the approval process for new development, the City of Pittsburg (CA) has standard conditions for all new businesses. In this manner, the city can direct development to protect water quality. Requirements for trash enclosures and drainage from paved surfaces are among the standard conditions listed. Standard conditions may not apply to each specific project; therefore, each project is reviewed individually with a Community Development staff person at the time of application. For further information contact the Community Development Department, City of Pittsburg, (510) 439-4920. Source: Model Urban Runoff Program, Appendix 3U.

Storm Infiltration Project
The City of Maplewood, MN, initiated a storm water infiltration project in 1995. The project utilizes a swale system rather than a traditional curb and gutter system to manage runoff. Residents choose how they want to plant the swales with native, water-loving species. High assessments on homes for curb and gutter improvements were avoided with this approach. For further information contact the City Engineer, Maplewood, MN, (612) 770-4550. Source: NRDC, Storm Water Strategies Community Responses to Runoff Pollution, May 1999.

Urban Watershed Retrofit Program
In Austin, TX, private developers can choose to make a payment to the city based on the amount of new impervious cover instead of installing on-site water-quality controls. The ordinance fee, along with monthly drainage utility fees, generates funds for retrofitting performed by the city. The city has used this process to produce a series of interconnected wet ponds for pollutant reduction from storm water. For further information contact the Project Administrator, City of Austin Watershed Protection Department, TX, 512-499-1863. Source: NRDC, Storm Water Strategies Community Responses to Runoff Pollution, May 1999.

Nashville, TN MS4 Storm Water Permit - 4/3/96
The permittee shall require, in areas of new development and significant redevelopment, installation of urban storm water BMP's. In particular the permittee shall:

i) establish design criteria for wet and extended dry detention ponds and define the conditions when such ponds shall be installed; Due 1 year from permit date;

ii) collect influent and effluent data on at least three of the newly installed ponds (24-48 months from permit date);

iii) report yearly on the performance of these ponds (3rd, 4th, and 5th annual reports);

iv) define "significant redevelopment" and establish criteria for installing water quality control systems in redevelopment.

Nashville, TN MS4 Storm Water Permit - 4/3/96
The permittee shall define its master planning effort (within 12 months) by investigating the following matters and setting forth a strategy to address each matter:

i) changes to laws, ordinances, rules, etc.;

ii) educating and involving the city council and planning and zoning boards;

iii) design criteria for new development, including restrictions on impervious area; use of pervious paving material; source treatment, flow attenuation and infiltration devices; locating local and regional detention basins; provisions for recharge of groundwater; and restrictions for development in steeply sloped areas;

iv) changes to administrative procedures; and

v) education of land developers

Prince George's County, MD Phase I MS4 Community (Permit and Case Study)
All new developments [in the County] are required to treat the first ½ inch of runoff from their site as well as the 2, 10, and 100 year storm events. Although the Storm Water Ordinance allows for waivers of on-site controls, rarely, if ever, are water quality-related (first ½ inch) controls waived. Quantity controls are only waived when there is no possible threat of structural flooding. The typical structural water quality control devices used for all types of development include: infiltration trenches, retention and detention basins, oil/grit separators, vegetative filters, and buffers. (Prince George's County, MD, Storm Water Management Program requirements under their Phase I MS4 permit)

Prince George's County, MD, has evolved into a leader of information management/analysis as a way to provide better storm water management. The county conducts ongoing, multi-year assessments of storm water runoff, which has lead to improved land development techniques, creating a new site design process to control storm water runoff, referred to as low impact development (LID). The principle goal of LID is to provide the maximum protection to the existing stream ecology by maintaining the watershed's pre-developed hydrologic regime (a decrease in runoff generation between 75- and 95-percent from current land development designs). LID allows the site planner/developer to use a wide array of simple, cost-effective techniques that focus on site-level hydrologic control. Several other Phase I municipalities are actively following the development of LID techniques (e.g., Portland, OR), to help shape their future storm water management efforts. Decreased pollutant concentrations in a water body are not the only measurable benefit that the LID approach addresses. Additional benefit to the environment ensues because of problems avoided. Changes in development techniques and patterns that decrease percent imperviousness and combined with BMPs that infiltrate storm water runoff from new developments mean local streams will retain their current natural condition. Where implemented appropriately, LID designs should be able to yield a pollutant load reduction simply because less runoff occurs. (from Case Study)

Austin, TX MS4 Storm Water Case Study (Assessment of Controls)
In Austin, TX, a Phase I MS4, a joint public/private enterprise between the state of Texas and a private developer is installing storm water detention ponds to minimize the impacts of a mixed-use development while providing aesthetic and economic benefits. The resulting pollutant load reduction for the detention ponds has been estimated based on local rainfall patterns, design parameters used in the pond, and removal efficiencies typical of detention ponds. Compared to an unmanaged condition, the ponds will reduce the sediment discharged annually from the site by several tons and reduce nutrients discharged between 44 and 65 percent.

6. Pollution prevention/good housekeeping for municipal operations.

Floatable Removal
The City of Cocoa Beach, FL, developed an insert for catchbasins that makes floatable removal more effective and easy. Twice per month, storm water crews inspect and clean as necessary all 760 storm water drains in Cocoa Beach. Sediment-clogged storm lines are cleaned on a schedule using a truck with a jet hose and vacuum. For further information contact the City of Cocoa Beach, Florida, Storm water Department, (407) 868-3292. Source: NRDC, Storm Water Strategies Community Responses to Runoff Pollution, May 1999.

Smart Salting Program
The Vermont Agency of Transportation developed a Smart Salting Program, based on the following principle—" the warmer the roadbed, the less salt is needed to clear snow and ice." Normally, those applying salt to roads measure temperature using a standard outdoor thermometer held or suspended at chest or eye level. However, the temperature of the roadbed is often several degrees warmer than the air temperature, especially if the sun is shining. Application rates calculated from temperatures measured by wall-mounted thermometers can therefore exceed the amount actually necessary. The Vermont Agency of Transportation installed infrared sensors on the bottoms of snowplows, which measure the temperature of the roadway as trucks pass over, allowing more accurate calculations of the required salt needed. The program has been expanded statewide, where the average reduction in salt usage is 28%. For further information contact the Vermont Agency of Transportation, (802) 828-5696. Source: NRDC, Storm Water Strategies Community Responses to Runoff Pollution, May 1999.

Park Design to Reduce Pesticide and Fertilizer Use
The Howard County (MD) Parks and Recreation Department found that wildflower meadows were twenty times less expensive to maintain than conventional turf grass. This strategy also reduces the amount of pesticides and fertilizers applied to county grounds. They are currently incorporating the strategy into new parks as they are being developed. For further information contact the Howard County Parks and Recreation Department, MD, (410) 313-4730.

Municipal Maintenance
The Alameda Clean Water Program provides an example of a pollution prevention plan for a fleet maintenance facility. The plan requires the following: a pollution prevention team, site map, list of significant materials, description of potential pollutants, and assessment of potential pollutant sources, and storm water BMPs. For further information contact the Alameda County Countywide Clean Water Program, Alameda County Public Works, (510) 670-5543. Source: Model Urban Runoff Program, Appendix 3L.

City of Philadelphia, PA MS4 Storm Water Permit - 9/29/95
The city will work to reduce the amount of salt used for deicing practices, consistent with its comprehensive snow emergency management procedures. The city will provide temporary cover and/or berms at the three uncovered storage piles during the first year of permit issuance. Permanent structures will be constructed within three years of permit issuance.

Denver, CO MS4 Storm Water Permit - 5/10/96
Denver will assess and minimize the impacts on water quality of receiving waters from any flood management projects that it undertakes . At the time when substantial maintenance or rehabilitation work is planned, Denver will also evaluate the feasibility of retro-fitting existing structural flood control devices to provide additional pollutant removal from storm water.

Baltimore County, MD MS4 Storm Water Permit - 3/30/95
Baltimore County shall conduct maintenance inspections of all storm water management facilities at least once every three years.

Prince Georges County, MD Storm Water Permit - 11/17/93
Within 3 years, the permittee shall perform an assessment regarding the effects of road maintenance activities including street sweeping, litter control, deicing procedures, and the application of herbicides for vegetation control on storm water discharges. This assessment shall include an analysis of alternative practices for reducing pollutants associated with road maintenance activities. Within those three years, the permittee shall incorporate effective alternative practices in its road maintenance procedures for reducing pollutants.

Palo Alto, CA MS4 Phase I Storm Water Permit
In Palo Alto, CA, a Phase I MS4 permittee, pollution prevention planning and engineering resulted in a decrease in pollutant concentrations originating from public utility yards. Concentrations of metals in storm water runoff decrease significantly with BMP employment and regular monitoring has demonstrated that improvements in storm water quality have been sustained over several years.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
DESIGNATION PLAN AND CRITERIA
FOR
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

October 15, 2002

This draft document outlines both the criteria and the process that the Louisiana Department of Environmental Quality (LDEQ) plans to use to designate Municipal Separate Storm Sewer Systems (MS4s) for inclusion in the Louisiana Pollutant Discharge Elimination System (LPDES) storm water permitting program. These criteria apply to small MS4s that are located outside U.S. Census Bureau-defined Urbanized Areas (UAs).

These designation criteria will be used to evaluate candidate MS4s in all areas of the State of Louisiana.

A glossary of terms is included at the end of this document.

Introduction

The U.S. Environmental Protection Agency (EPA) published the NPDES Storm Water "Phase II" Final Rule on December 8, 1999 (64 FR 68722). One component of this rule applies to operators of small MS4s with discharges entering surface waters of the United States.

The requirements of the rule were incorporated into the Louisiana Administrative Code effective October 2000.

There are two ways by which a small MS4 may be identified as a "regulated small MS4" that requires permit coverage:

- Within UAs, all core cities, plus any other MS4 systems operating within the UA unless specifically waived by the LDEQ;
- Outside UAs, small MS4s serving jurisdictions with a population of at least 10,000 and with a population density of at least 1,000 people per square mile and which meet certain designation criteria, are to be designated by LDEQ based on evaluation criteria to determine existing or potential storm water impacts.

This document outlines the designation criteria and process LDEQ proposes to use in determining whether specific small MS4s will be designated as a "regulated small MS4".

A. Designation Criteria

LDEQ must consider whether storm water discharges from small MS4s that are located outside UAs and are candidates for designation as regulated MS4s, result or potentially result, in exceedances of water quality standards, including impairment of designated uses, and/or adverse habitat or biological impacts.

LDEQ proposes to use the following criteria, in the form of questions, as the basis for evaluating MS4s within its jurisdiction that have a Year 2000 Census population greater than 10,000 people and a density of more than 1,000 people per square mile. These criteria are based on recommendations made by EPA in the Phase II rule proposal, and are intended to evaluate the potential or actual water quality impacts from storm water discharges originating within highly populated areas.

1) Does(Do) the MS4 storm water outfall(s) occur near a drinking water intake structure located on the receiving stream?

If "Drinking Water Supply" is listed as a designated use of a basin subsegment number to which an MS4 discharges, then LDEQ surveillance personnel in the appropriate regional office will be contacted to determine the location of the MS4 storm water outfall(s) and the proximity of the outfall(s) to drinking water intake structures. If the MS4 storm water outfall(s) occur near a drinking water intake structure then the discharge will be classified as a discharge to "sensitive waters". If the MS4 storm water outfall(s) discharge to a stream that is designated as a "Drinking Water Supply" but there are no drinking water intake structures nearby, then the discharge will be classified as a discharge to non-sensitive waters. "Near" and "Nearby" in this sense are arbitrary terms that give the regulatory personnel discretion to make a determination based on characteristics of the receiving stream and location of storm water outfall(s) relative to any drinking water intake structures.

2) Does the MS4 discharge storm water to waters deemed essential for the conservation of threatened and endangered species?

Basin subsegment numbers will be compared to the basin subsegment numbers in the U.S. Fish and Wildlife Service's list of sensitive areas that was addressed to Ms. Linda Levy and dated September 18, 2002. MS4s that have at least one outfall that discharges to a basin subsegment number that occurs on the list provided by the U.S. Fish and Wildlife Service shall be evaluated to determine if they are discharging to "sensitive waters". LDEQ will consult with the U.S. Fish and Wildlife Service to determine if the MS4's storm water discharges to receiving waters deemed essential for the conservation of threatened or endangered species. MS4s discharging storm water to receiving waters deemed essential for the conservation of threatened or endangered species will be considered discharging to "sensitive waters".

3) **If the receiving stream is listed as a 303(d) impaired water body, is municipal runoff or urban runoff listed as a "suspected source" of pollutants of concern?**

MS4 systems discharging to Section 303(d)-listed segments for which any of the following three factors have been identified as suspected sources of pollutants will be considered significant contributors of pollutants for purposes of designation decisions and will be designated as regulated small MS4s:

1) Municipal Separate Storm Sewer System (MS4)
2) Residential Districts
3) Municipal (Urbanized High Density Area)

A storm water discharger that is required to reduce loading through an EPA-approved Total Maximum Daily Load (TMDL) analysis shall also be considered a significant contributor of pollutants to waters of the United States and will be designated as a regulated small MS4.

4) **Does the MS4 discharge storm water to state designated Outstanding Natural Resource Waters?**

The MS4 will be considered discharging to "sensitive waters" if it discharges to a basin subsegment number whose designated use is listed as "Outstanding Natural Resource Water".

B. Designation Process

LDEQ is required to evaluate all small MS4s located outside U.S. Census-designated UAs with a population of at least 10,000 and 1,000 people per square mile density threshold. These potentially designated small MS4s will be evaluated according to the designation criteria established in Section A. Those MS4s that meet the criteria as needing LPDES storm water permit coverage will be notified in writing by December 9, 2002. In addition, final determinations on public petitions for designation received by LDEQ under LAC 33:IX.2341.F must be made by the Agency within 180 days from the receipt of the petition (LAC 33:IX.2341.F.5).

An alphabetical list of all qualifying urbanized areas according to the U.S. Census Bureau's "Qualifying Urban Areas for Census 2000; Notice" was published in the May 1, 2002 (Volume 67, Number 84) Federal Register. Attached as Appendix A is a list that contains the names of small MS4s that are located outside U.S. Census-designated UAs that meet the threshold of having a population of at least 10,000 and a population density of at least 1,000 people based on actual Year 2000 Census Bureau data.

LDEQ will consider all reasonably available information for a particular candidate MS4 prior to making a final designation decision. Sources of information include, but are not limited to: U.S. Census Bureau statistics; state published Clean Water Act section 303(d) lists; EPA-approved TMDL analysis; endangered/threatened species listings as published by the National Marine Fisheries Service and/or U.S. Fish and Wildlife Service; other supplementary information as provided by the candidate MS4; and/or other sources.

In general, water quality considerations and overall impacts of storm water discharges will be given more "weight" than population characteristic in this decision-making process.

MS4s that meet the designation criteria will be notified, by letter, no later than December 9, 2002, that they have been designated as a "regulated small MS4" and are required to apply for permit coverage within 180 days of notice from the LDEQ that permit coverage is required.

C. Designation Determination

1. MS4 systems located within Section 303(d)-listed segments for which "municipal runoff" or "urban runoff" has been identified as a contributing source of pollutants will be considered a significant contributor of pollutants for purposes of designation decisions and will be designated as a regulated small MS4.

2. A storm water discharger that is required to reduce loading through an EPA-approved Total Maximum Daily Load (TMDL) analysis shall also be considered a significant contributor of pollutants to waters of the United States and will be designated as a regulated small MS4.

3. MS4 systems that do not meet the criteria of either C.1 or C.2 above will be evaluated based on their potential impacts to sensitive waters. It shall be determined if the MS4 discharges to (1) Outstanding Natural Resource Waters, (2) Drinking Water Supplies, or (3) waters deemed essential for the conservation of threatened and endangered species as per information provided to LDEQ by the U.S. Fish and Wildlife Service. Any MS4 that discharges to a basin subsegment(s) determined to be sensitive due to at least two of the three following concerns will be designated as a regulated small MS4: (1) waters designated as Outstanding Natural Resource Waters; (2) streams with water intake structures located near MS4 storm water outfalls, or (3) waters that are deemed to be essential for the conservation of threatened and endangered species.

4. MS4s listed in Appendix A that do not meet the designation criteria in C.1 or C. 2 and do not meet at least two of the criteria listed above in C.3 will not be designated as regulated small MS4s and shall not be required to apply for permit coverage.

Attached is Appendix B which is a list of the small MS4s to which LDEQ applied the designation criteria, and the designation determination that was made for each evaluated MS4. The following five small MS4s have been designated as regulated small MS4s by LDEQ and are required to submit permit applications within 180 days of official notification that permit coverage is required: Abbeville, Bastrop, Hammond, Morgan City, and Natchitoches.

Glossary

Discharge means the volume of water (and suspended sediment in surface water) that passes a given location within a given period of time.

Louisiana Pollutant Discharge Elimination System (LPDES) means those portions of the Louisiana Environmental Quality Act and the Louisiana Water Control Law and all regulations promulgated under their authority which are deemed equivalent to the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act in accordance with Section 402 of the Clean Water Act and all applicable federal regulations.

Municipal Separate Storm Sewer means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian organization, or a designated and approved management agency under Section 208 of the Clean Water Act that discharges to waters of the United States;

(ii) Designed or used for collecting or conveying storm water;

(iii) Which is not a combined sewer; and

(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at LAC 33:IX.2313.

Regulated Small MS4 means an MS4 which is automatically designated for inclusion in the Phase II storm water permitting program by its location within an urbanized area, or by designation by the LDEQ.

Sensitive waters generally include public drinking water intakes and their designated protection areas; swimming beaches; oyster propagation areas; state-designated Outstanding Natural Resource Waters; waters within Federal and State parks; and waters containing threatened or endangered species and their habitat.

Small Municipal Separate Storm Sewer System means all separate storm sewers that are:

(i) Owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or any Indian tribe or an authorized Indian tribal organization, or a designated and approved management

agency under section 208 of the Clean Water Act that discharges to waters of the United States.

(ii) Not defined as "large" or "medium" municipal separate storm sewer systems pursuant to LAC 33:IX.2341.B.4 and B.7.

(iii) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospitals or prison complexes and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

Storm Water means storm water runoff, snow melt runoff, and surface runoff and drainage.

Urbanized Area (UA) is a land area comprising one or more places - central place(s) - and the adjacent densely settled surrounding area - urban fringe - that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile. It is a calculation used by the Bureau of the Census to determine the geographic boundaries of the most heavily developed and dense urban areas.

APPENDIX B

SMALL MS4 DESIGNATION

Non-UA, Population 10,000^{+}, Pop. Density 1,000^{+}/mi^{2}

AREA	Population (2000) & Density (Pop./mi^{2}) (1990)	Basin subsegment(s) that receive discharge and designated uses of each subsegment	Listed as a "suspected source" on a 303(d) waterway?	Endangered Species	Outstanding Natural Resource Waters	Drinking Water Supply	Designated by the State as a Regulated Small MS4? YES or NO
Abbeville city (Vermilion)	11,887 2,258.3	060802 A B C E 060903 A B C	YES (060802 – MS4)	NO	NO	NO	YES
Bastrop city (Morehouse)	12,988 1,672.7	080401 A B C G 080904 A B C	NO	YES (080401 & 080904)	YES (080401)	NO	YES
Bogalusa City (Washington)	13,365 1,508.4	090104 A B C 090401 A B C 090101 A B C	NO	YES (090101, 090104 & 090401)	NO	NO	NO

AREA	Population (2000) & Density (Pop./mi²) (1990)	Basin subsegment(s) that receive discharge and designated uses of each subsegment	Listed as a "suspected source" on a 303(d) waterway?	Endangered Species	*Outstanding* Natural Resource Waters	Drinking Water Supply	Designated by the State as a Regulated Small MS4? YES or NO
Crowley City (Acadia)	14,225 3,063.4	050201 A B C F	NO	NO	NO	NO	NO
Eunice city (St. Landry/ Acadia)	11,499 2,407.7	050101 A B C F 050103 A B C F	NO	NO	NO	NO	NO
Fort Polk South (Vernon)	11,000 1,771.1	110506 A B C 030506 A B C	NO	NO	NO	NO	NO

AREA	Population (2000) & Density (Pop./mi²) (1990)	Basin subsegment(s) that receive discharge and designated uses of each subsegment	Listed as a "suspected source" on a 303(d) waterway?	Endangered Species	Outstanding Natural Resource Waters	Drinking Water Supply	Designated by the State as a Regulated Small MS4? YES or NO
Hammond city (Tangipahoa)	17,639 1,404.1	040701 A B C G 040505 A B C 040504 A B C 040604 A B C	YES (040505 – Residential Districts)	YES (040701)	YES (040701)	NO	YES
Jennings city (Jeff. Davis)	10,986 1,109.0	050603 A B C E 050301 A B C E 050401 A B C E	NO	NO	NO	NO	NO

AREA	Population (2000) & Density (Pop./mi²) (1990)	Basin subsegment(s) that receive discharge and designated uses of each subsegment	Listed as a "suspected source" on a 303(d) waterway?	Endangered Species	Outstanding Natural Resource Waters	Drinking Water Supply	Designated by the State as a Regulated Small MS4? YES or NO
Laplace city (St. John the Baptist)	27,684 1,142.5	040601 A B C____ 040602 A B C____	NO	YES (040601 & 040602)	NO	NO	NO
Minden city (Webster)	13,027 1,360.0	100501 A B C F G 100502 A B C F__ 100503 A B C F__ 100504 A B C F__	NO	NO	YES (100501)	NO	NO

AREA	Population (2000) & Density (Pop./mi²) (1990)	Basin subsegment(s) that receive discharge and designated uses of each subsegment	Listed as a "suspected source" on a 303(d) waterway?	Endangered Species	Outstanding Natural Resource Waters	Drinking Water Supply	Designated by the State as a Regulated Small MS4? YES or NO
Morgan City (St. Mary)	12,703 2,475.7	010501 A B C D 010502 A B C 010803 A B C 120205 A B C D 120403 A B C D E	NO	YES (010501, 010502, 010803 & 120403)	NO	YES (010501, & 120205)	YES
Natchitoches city (Natchitoches)	17,865 1,642.8	101001 A B C D E 101101 A B C D E 101103 A B C E G	NO	YES (101101)	YES (101103)	NO (101001 – does not receive water from MS4s) (101101 – no intake structure)	YES

AREA	Population (2000) & Density (Pop./mi²) (1990)	Basin subsegment(s) that receive discharge and designated uses of each subsegment	Listed as a "suspected source" on a 303(d) waterway?	Endangered Species	Outstanding Natural Resource Waters	Drinking Water Supply	Designated by the State as a Regulated Small MS4? YES or NO
New Iberia city (Iberia)	32,623 3,133.8	060401 A B C 060701 A B C 060901 A B C 060904 A B C 060908 A B C	NO	NO	NO	NO	NO
Opelousas city (St. Landry)	22,860 2,636.3	050201 A B C F 060301 A B C 060801 A B C F	NO	NO	NO	NO	NO

AREA	Population (2000) & Density (Pop./mi²) (1990)	Basin subsegment(s) that receive discharge and designated uses of each subsegment	Listed as a "suspected source" on a 303(d) waterway?	Endangered Species	Outstanding Natural Resource Waters	Drinking Water Supply	Designated by the State as a Regulated Small MS4? YES or NO
Ruston city (Lincoln)	20,546 1,158.6	080605 A B C G 080606 A B C 081401 A B C	NO	YES (080605)	NO (080605 not near city)	NO	NO

*Consider uses: public drinking water intake, oyster propagation, Outstanding Natural Resource Waters, and waters deemed essential for the conservation of threatened or endangered species

Cities/areas which appear in this list include those listed in Appendix 7 of the Phase II storm water rule, as well as those potential candidates which could/should be evaluated based on latest census data or other considerations. Thibodaux was listed in Appendix 7 of the Phase II storm water rule as a potential designee but is not included in this table because it is included in the Houma UA and is therefore automatically designated as a regulated small MS4. Entries in this appendix may be incomplete and are subject to revision.

The designated uses listed in this table are defined as:

A: primary contact recreation; B: secondary contact recreation; C: propagation of fish and wildlife; D: drinking water supply; F: agriculture; and G: outstanding natural resource waters.